

FORM PTO-144
(Rev. 2-32)U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

02-312-G
(600/041)

Serial No.

10780,447

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)

Applicant:

Vargeese et al.

Filing Date:

February 13, 2004

Group:

1616

U.S. PATENT APPLICATION DOCUMENTS

Examiner Initial		Document Number	Filing Date	Name	Class	Subclass	Publication Date if Appropriate
ESO	*	09/301,511	04/28/99	Beigelman et al.			
ESO	*	09/800,594	03/06/01	Usman et al.			
ESO	*	10/427,160	04/30/03	Beigelman et al.			
ESO	*	60/082,404	04/20/98	Thompson et al.			
ESO	*	60/292,217	05/18/01	Adamic et al.			
ESO	*	60/306,883	07/20/01	Vargeese et al.			
ESO	*	60/311,865	08/13/01	Vargeese et al.			
ESO	*	60/358,580	02/20/02	Beigelman et al.			
ESO	*	60/362,016	03/06/02	Matulic-Adamic et al.			
ESO	*	60/363,124	03/11/02	Beigelman et al.			
ESO	*	60/386,782	06/06/02	Beigelman et al.			
ESO	*	60/406,784	08/29/02	Beigelman et al.			
ESO	*	60/408,378	09/05/02	Beigelman et al.			
ESO	*	60/409,293	09/09/02	Beigelman et al.			

U.S. PATENT DOCUMENTS

Examiner		Document					Filing Date if
EXAMINER	/Eric Olson/				DATE CONSIDERED	10/30/2006	

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Initial		Number	Date	Name	Class	Subclass	Appropriate
ESO	*	4,987,071	01/22/91	Cech et al.			
ESO	*	5,108,921	04/28/92	Low et al.			
ESO	*	5,334,711	08/02/94	Sproat			
ESO	*	5,416,016	05/16/95	Low et al.			
ESO	*	5,589,332	12/31/96	Shih et al.			
ESO	*	5,627,053	05/06/97	Usman et al.			
ESO	*	5,631,359	05/20/97	Chowrira et al.			
ESO	*	5,631,360	05/20/97	Usman et al.			
ESO	*	5,633,133	05/27/97	Long et al.			
ESO	*	5,670,633	09/23/97	Cook et al.			
ESO	*	5,672,695	09/30/97	Eckstein et al.			
ESO	*	5,716,824	02/10/98	Beigelman et al.			
ESO	*	5,741,679	04/21/98	George et al.			
ESO	*	5,792,847	08/11/98	Buhr et al.			
ESO	*	5,804,683	09/08/98	Usman et al.			
ESO	*	5,814,620	09/29/98	Robinson et al.			
ESO	*	5,831,071	11/03/98	Usman et al.			
ESO	*	5,834,186	11/10/98	George et al.			
ESO	*	5,849,902	12/15/98	Arrow et al.			

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ESO	*	5,871,914	02/16/99	Nathan et al.			
ESO	*	5,898,031	04/27/99	Crooke			
ESO	*	5,989,912	11/23/99	Arrow et al.			
ESO	*	5,998,203	12/07/99	Adamic et al.			
ESO	*	6,001,311	12/14/99	Brennan			
ESO	*	6,005,087	12/21/99	Cook et al.			
ESO	*	6,008,400	12/28/99	Scaringe et al.			
ESO	*	6,054,576	04/25/00	Bellon et al.			
ESO	*	6,107,094	08/22/00	Crooke			
ESO	*	6,111,086	08/29/00	Scaringe et al.			
ESO	*	6,117,657	09/12/00	Usman et al.			
ESO	*	6,153,737	11/28/00	Manoharan et al.			
ESO	*	6,162,909	12/19/00	Bellon et al.			
ESO	*	6,168,778	01/02/01	Janjic et al.			
ESO	*	6,303,773	10/16/01	Bellon et al.			
ESO	*	6,335,434	01/01/02	Guzaev et al.			
ESO	*	6,353,098	03/05/02	Usman et al.			
ESO	*	6,362,323	03/26/02	Usman et al.			
ESO	*	6,395,492	05/28/02	Manoharan et al.			
ESO	*	6,437,117	08/20/02	Usman et al.			

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ESO	*	6,469,158	10/22/02	Usman et al.			
ESO	*	6,476,205	11/05/02	Buhr et al.			
ESO	*	6,506,559	01/14/03	Fire et al.			
ESO	*	6,528,631	03/04/03	Cook et al.			

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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
ESO	1	2,359,180	08/03/00	CA (Kreutzer et al.)				
ESO	*	0 360 257	02/28/90	EP (Hampel et al.)				
ESO	*	88/09810	12/15/88	WO (Tullis et al.)				
ESO	*	89/02439	03/23/89	WO (Arnold et al.)				
ESO	*	90/12096	10/18/90	WO (Low et al.)				
ESO	2	90/14090	11/29/90	WO (Gillespie et al.)				
ESO	*	91/03162	03/21/91	WO (Rossi et al.)				
ESO	*	92/07065	04/30/92	WO (Eckstein et al.)				
ESO	*	93/15187	08/05/93	WO (Usman et al.)				
ESO	*	93/23569	11/25/93	WO (Draper et al.)				
ESO	3	94/01550	01/20/94	WO (Agrawal et al.)				
ESO	*	95/06731	03/09/95	WO (Usman et al.)				

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ESO	*	95/11304	04/27/95	WO (Usman et al.)				
ESO	*	95/11910	05/04/95	WO (Dudycz et al.)				
ESO	*	96/10390	04/11/96	WO (Ansell et al.)				
ESO	*	96/10391	04/11/96	WO (Choi et al.)				
ESO	*	96/10392	04/11/96	WO (Holland et al.)				
ESO	*	96/22689	08/01/96	WO (Pyle et al.)				
ESO	*	97/26270	07/24/97	WO (Beigelman et al.)				
ESO	*	98/13526	04/02/98	WO (Woolf et al.)				
ESO	*	98/27104	06/25/98	WO (Breaker et al.)				
ESO	*	98/28317	07/02/98	WO (Matulic-Adamic et al.)				
ESO	*	98/43993	10/08/98	WO (Breaker et al.)				
ESO	*	98/58058	12/23/98	WO (Ludwig & Sproat)				
ESO	*	99/07409	02/18/99	WO (Deschamps de Paillette et al.)				
ESO	*	99/16871	04/08/99	WO (Eckstein et al.)				
ESO	*	99/17120	04/08/99	WO (Davis and Bishop)				
ESO	*	99/29842	06/17/99	WO (Sullenger et al.)				
ESO	*	99/32619	07/01/99	WO (Fire et al.)				
ESO	4	99/49029	09/30/99	WO (Graham et al.)				
ESO	5	99/53050	10/21/99	WO (Waterhouse et al.)				
ESO	*	99/54459	10/28/99	WO (Thompson et al.)				

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ESO	*	99/55857	11/04/99	WO (Beigelman et al.)				
ESO	6	99/61631	12/02/99	WO (Heifetz et al.)				
ESO	*	99/66063	12/23/99	WO (Manoharan et al.)				
ESO	*	00/01846	01/13/00	WO (Plaetinck et al.)				
ESO	*	00/24931	05/04/00	WO (Nathan and Ellington)				
ESO	*	00/26226	05/11/00	WO (Breaker et al.)				
ESO	*	00/44895	08/03/00	WO (Kreutzer et al.)				
ESO	*	00/44914	08/03/00	WO (Li et al.)				
ESO	7	00/49035	08/24/00	WO (Sheen et al.)	(
ESO	8	00/63364	10/26/00	WO (Pachuk et al.)				
ESO	*	01/29058	04/26/01	WO (Mello et al.)				
ESO	*	01/36646	05/25/01	WO (Zernicka-Goetz et al.)				
ESO	9	01/96584	12/20/01	WO (Mushegian et al)				
ESO	*	02/15876	05/17/02	WO (Beigelman et al.)				
ESO	10	02/22636	03/21/02	WO (Bennett et al.)				
ESO	*	03/070918 (PCT/US03/05346)	08/28/03	WO (McSwiggen et al.)				
ESO	*	03/074654 (PCT/US03/05028)	09/12/03	WO (McSwiggen et al.)				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

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ESO	*	Abramovitz et al., "Catalytic Role of 2'-Hydroxyl Groups Within a Group II Intron Active Site," <u>Science</u> 271:1410-1413 (1996)
ESO	*	Allshire, "RNAi and Heterochromatin - A Hushed-up Affair," <u>Science</u> 297:1818-1819 (2002)
ESO	*	Antopolsky et al., "Peptide-Oligonucleotide Phosphorothioate Conjugates with Membrane Translocation and Nuclear Localization Properties," <u>Bioconjugate Chem.</u> 10:598-606 (1999)
ESO	*	Arap et al., "Cancer Treatment by Targeted Drug Delivery to Tumor Vasculature in a Mouse Model," <u>Science</u> 279:377-380 (1998)
ESO	*	Baenziger and Fiete, "Galactose and N-Acetylgalactosamine-Specific Endocytosis of Glycopeptides by Isolated Rat Hepatocytes," <u>Cell</u> 22:611-620 (1980)
ESO	11	Bahramian et al., "Transcriptional and Posttranscriptional Silencing of Rodent $\alpha 1(I)$ Collagen by a Homologous Transcriptionally Self-Silenced Transgene," <u>Molecular and Cellular Biology</u> , 274-283 (1999)
ESO	*	Banerjee and Turner, "The Time Dependence of Chemical Modification Reveals Slow Steps in the Folding of a Group I Ribozyme," <u>Biochemistry</u> 34:6504-6512 (1995)
ESO	*	Bartel and Szostak, "Isolation of New Ribozymes from a Large Pool of Random Sequences," <u>Science</u> 261:1411-1418 (1993)
ESO	*	Bass, "The short answer," <u>Nature</u> 411:428-429 (2001)
ESO	*	Beaucage and Iyer, "The Functionalization of Oligonucleotides Via Phosphoramidite Derivatives," <u>Tetrahedron</u> 49:1925-1963 (1993)
ESO	*	Beaudry and Joyce, "Directed Evolution of an RNA Enzyme," <u>Science</u> 257:635-641 (1992)
ESO	*	Beigelman et al., "Chemical Modification of Hammerhead Ribozymes," <u>The Journal of Biological Chemistry</u> 270:25702-25708 (1995)
ESO	*	Bellon et al., "Amino-Linked Ribozymes: Post-Synthetic Conjugation of Half-Ribozymes," <u>Nucleosides & Nucleotides</u> 16:951-954 (1997)

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ESO	*	Bellon et al., "Post-synthetically Ligated Ribozymes: An Alternative Approach to Iterative Solid Phase Synthesis," <i>Bioconjugate Chem.</i> 8:204-212 (1997)
ESO	*	Berzal-Herranz et al., "Essential nucleotide sequences and secondary structure elements of the hairpin ribozyme," <i>EBMO J.</i> 12:2567-2574 (1993)
ESO	*	Berzal-Herranz et al., "In vitro selection of active hairpin ribozymes by sequential RNA-catalyzed cleavage and ligation reactions," <i>Genes & Development</i> 6:129-134 (1992)
ESO	*	Bevilacqua et al., "A Mechanistic Framework for the Second Step of Splicing Catalyzed by the <i>Tetrahymena</i> Ribozyme," <i>Biochemistry</i> 35:648-668 (1996)
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ESO	*	Breaker, "Catalytic DNA: in training and seeking employment," <i>Nature Biotechnology</i> 17:422-423 (1999)
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ESO	*	Burgin et al., "Chemically Modified Hammerhead Ribozymes with Improved Catalytic Rates," <u>Biochemistry</u> 35:14090-14097 (1996) (volume no. mistakenly listed as 6)
ESO	*	Burlina et al., "Chemical Engineering of RNase Resistant and Catalytically Active Hammerhead Ribozymes," <u>Bioorganic & Medicinal Chemistry</u> 5:1999-2010 (1997)
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ESO	*	Collins and Olive, "Reaction Conditions and Kinetics of Self-Cleavage of a Ribozyme Derived From <i>Neurospora</i> VS RNA," <u>Biochemistry</u> 32:2795-2799 (1993)
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ESO	*	Daniels et al., "Two Competing Pathways for Self-splicing by Group II Introns: A Quantitative Analysis of <i>in Vitro</i> Reaction Rates and Products," <u>J. Mol. Biol.</u> 256:31-49 (1996)
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ESO	*	Feldstein et al., "Two sequences participating in the autolytic processing of satellite tobacco ringspot virus complementary RNA," <u>Gene</u> 82:53-61 (1989)
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ESO	*	Findeis, "Stepwise Synthesis of a GalNAc-containing Cluster Glycoside Ligand of the Asialoglycoprotein Receptor," <u>Int. J. Peptide Protein Res.</u> 43:477-485 (1994)

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ESO	13	Fire et al., "Potent and Specific Genetic Interference by Double-Stranded RNA in <i>Caenorhabditis Elegans</i> ," <i>Nature</i> 391:806-811(1998)
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ESO	*	Godwin et al., "The Synthesis of Biologically Active Pteroylolo-γ-L-Glutamates (Folic Acid Conjugates)," <i>The Journal of Biological Chemistry</i> 247:2266-2271 (1972)
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ESO	*	Grasby et al., "Purine Functional Groups in Essential Residues of the Hairpin Ribozyme Required for Catalytic Cleavage of RNA," <i>Biochemistry</i> 34:4068-4076 (1995)
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FORM PTO-1449 (Rev. 2-32)	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 02-312-G (600/041)	Serial No. 10780,447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)			
		Filing Date: February 13, 2004	

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